



DESIGN THINKING

- VOLUME 1

Editor:

Dr. Manali Chatterjee

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Assistant Professor

Digital Business & Analytics

Jagdish Sheth School of Management (JAGSoM)

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Editorial: DESIGN THINKING

DR. MANALI CHATTERJEE

Assistant Professor

Design thinking has revolutionized the way businesses approach problem solving. This innovative methodology places the user at the centre of the design challenge, creating solutions that are not only impactful but also tailored to the specific needs and desires of the end user. It is no wonder that in recent years, the principles of design thinking have been widely adopted across a variety of industries and sectors.

This book delves deep into the world of design thinking, exploring its various applications in the business world. Chapter by chapter, they provide practical and actionable solutions to real-world problems, showing how the design thinking methodology can be used to create innovative and effective solutions. Whether you are an entrepreneur, a business leader, or a professional seeking to bring new perspectives to your work, this book is a valuable resource that will guide you through the design thinking process.

The principles of design thinking are not just limited to the business world. In fact, they can be applied to any complex system, be it government, social organizations, or even our personal lives. As David Kelley, the founder of IDEO, stated, "The main tenet of design thinking is empathy for the people you're trying to design for. Leadership is the same thing – building empathy for the people that you're entrusted to help." By embracing this philosophy, we can create solutions that not

only meet the needs of our users, but also have a positive impact on the world around us.

In this age of rapid technological growth and globalization, it has never been more important to embrace new ways of thinking and problem solving. This book provides a roadmap for businesses and individuals to do just that. It is my hope that you find the insights and guidance provided within these pages to be valuable and inspiring, as you navigate the exciting and ever-evolving landscape of design thinking.

ABOUT THE EDITOR



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Assistant Professor

Dr. Manali Chatterjee is Assistant Professor in the Digital business and Analytics area at Jagdish Sheth School of Management. She has completed her PhD from IIT Kharagpur. Her doctoral thesis is primarily focused on technology management and corporate strategy for high growth stocks. She has presented her doctoral work at various reputed conferences both in India and abroad.

DESIGN THINKING: AN OVERVIEW

Design thinking is a systematic, user-centric, and creative process that helps in designing innovative products and services to solve real-world problems. It places the needs and concerns of the user at the forefront of the design challenge and aims to better understand their needs and unmet demands. Through a structured process of research and decision making, design thinking seeks to create meaningful and impactful solutions. The objective of our study was to design an HRAI maturity model.

Over the past 10 years, there has been a rapid increase in the use of design thinking as a way to solve various business problems. The reason for this popularity is due to its ability to break down complex systems, whether it be in business, government, or social organizations. This approach allows for a thorough exploration of how to tackle big issues related to the growth of technology and globalization, how to quickly adapt to change, and how to balance the needs of individuals and large organizations. Additionally, design thinking prioritizes understanding the perspective of the customer and using this knowledge to find and solve problems, which in turn leads to greater business value.



Design thinking is a cyclical process that allows for constant iteration and improvement based on new information and feedback. The process is not a linear one, as it often requires going back and revisiting previous stages to make necessary changes. For instance, during the prototyping stage, you might realize that the problem you are trying to solve is not what you initially thought, leading you to redefine the problem or come up with a different solution. The 5-stage design thinking model, proposed by the Hasso-Plattner Institute of Design at Stanford University, consists of Empathize (gaining empathy for the audience), Define (defining a point of view based on user needs), Ideate (generating creative solutions), Prototype (building a representation of the solution), and Test (testing and gathering feedback from the target audience). The ultimate goal of design thinking is to build empathy for the people you are designing for and find impactful solutions to real problems.

This book is dedicated to addressing business issues through the use of the design thinking approach. It offers chapter-by-chapter solutions to various business problems in different sectors by utilizing the design thinking methodology.

DESIGN THINKING IN RETAIL AND FASHION

1. INTRODUCTION

The retail and fashion industry has experienced significant changes over the past decade, driven by advancements in technology and increased social connectivity. Retail brands now have a presence in the online space, with online sales continuing to grow. Customers now have omnichannel access to these brands, sharing information such as reviews and experiences through social media and other online platforms. Today's consumers are informed, empowered, and connected, and they expect a seamless and holistic digital experience. In light of this, retailers must adapt their business strategies to meet the changing needs of their customers. However, there are still gaps in the online experience that reveal a lack of empathy for consumers. To provide a comprehensive omnichannel experience, design thinking can play a critical role by exploring deeper into consumer psychology, user experience, and frictionless interactions.

The latest McKinsey report highlights India as a key player in the fashion industry, driven by the growing middle class and a robust manufacturing sector. The demand for fast fashion in India has risen, particularly among young adults who have embraced western styles. As both foreign and domestic brands continue to enter the market, competition in the retail fashion sector has become intense, making it difficult for businesses to retain customers. Despite these challenges, many apparel brands are embracing a digital-first approach, focusing on online sales and digital marketing, and using technology to create a personalized shopping experience for consumers. This shift has led to a surge in the number of direct-to-consumer (D2C) fashion and apparel brands.

According to a report by Business Wire, a subsidiary of Berkshire Hathaway, the major difficulties facing the clothing industry include (i) growing consumerism, (ii) delivering a distinct experience, and (iii) inventory control. This chapter provides case-study based solutions to the challenges faced by retail fashion brands, using design thinking as a method. Figure 2.1 presents a visual representation of the key challenges faced by this industry.

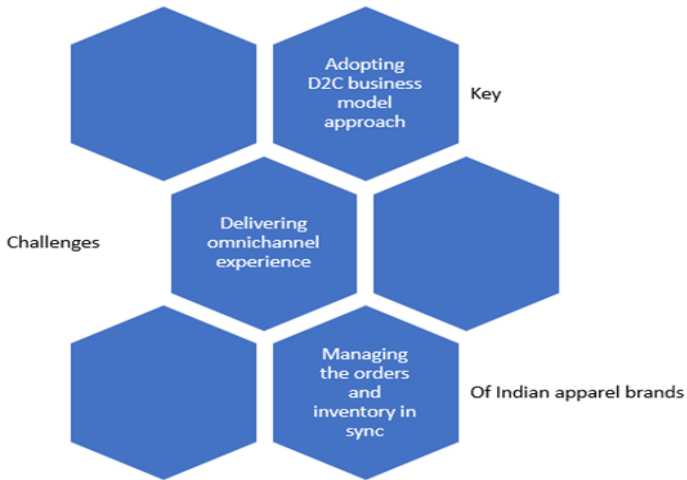


Figure 2.1: Key challenges of retail and fashion sector

In this chapter, the case-based solutions of the above-mentioned challenges are solved using design thinking as a methodology. Field visits were conducted at several branches of Fab India and Lifestyle stores. Next, the design thinking steps and solving the challenges of retail stores are presented in following stages:



2 Application of design thinking

This section presents the identification of customer pain points and solving that through five stages of design thinking.

2.1 Empathy

The following issues were identified during field visits to several well-known retail fashion stores as potential pain points for customers that could be addressed through design thinking methodologies:

- A stuffy atmosphere, despite the air conditioner being on.
- Inadequate parking due to limited space.
- Only 4 of the 10 billing counters were operational due to employee absences.
- Employees lacked computer skills.
- Non-functioning self-checkout counters.
- A broken credit card machine causing difficulties for customers.
- Inefficient door-to-door delivery with employees sometimes unable to locate customers' addresses or forgetting to bring all the items on the list.
- Long queues due to a shortage of employees during the COVID-19 pandemic.
- Overcrowding on the ground floor due to a limited number of billing counters.
- Untrained new staff.
- Limited job growth opportunities for staff.
- Overtime work required almost every week.
- Lack of proper computer training.

- An ineffective chain of command.
- A customer complaint was logged but no follow-up was made.

2.2 Problem definition

- To increase the overall efficiency of the branch both from employees and customers ends. The second issue faced is proper utilization of the floor space.
- Managing the long queue in front of trial rooms

2.3 Ideate & Solution:

This section discusses on the ideas of solving the

- Rating of Staff Behaviour
- 'Review' option introduced in app/ website for Hassle free process for customers to review the staff behaviour.
- "Cultural Training" inculcated as a part of employee training program to educate them about unconscious biases.
- Uniqueness
- Easy process for highly satisfied and least satisfied customers to rate and review the staff.

Tool no: 1 SCAMPER

Substitute – Existing racks with flexi circular tube. Regular mirrors with smart mirrors having augmented reality enabled.

Combine - Rating staff behavior

Eliminate – few mannequins.

Modify – Folding pattern.

Tool no: 2 Lateral Thinking

Random Names: Arrange, colour, floor, lights, view, chocolates, employees, customers, products, billing, offers.

Lights – lights make the room brighter. Similarly, proper arrangements of products will bring more brightness and colour to the store.

Chocolates – Offers are chocolates. Customers like them and this increases sales. However, banners taking up space is unsatisfactory.

Tool no: 3 Divergent Thinking

- (a) Customer segment: Access to products would be different for individuals as per their height.

Solution: Substitute existing racks with a Flexi Tube storage that are partially embedded into wall and few mannequins can be eliminated to increase floor space. The clothes can be rolled and stored for easy access and to have an easy view of the products inside Flexi tube storage.

- (b) For providing better shopping experience, retail fashion branches can take help of technology-based solutions. In quick time customers can check the fitting option of the dress and can come to the buying decision with the help of technology.

With augmented reality, input 'measurement' option available while signing up. If customer does not want to manually, do it, AR will help in setting the size.

2.4 PROTOTYPE:

PROTOTYPE 1: EMPLOYEYEE RATING SYSTEM

This will enable customers to provide feedback on the store employees they interact with. This will motivate the employees to provide better customer service. For instance, customers can rate the delivery people from a

restaurant when they receive their food, but there is no such system in place for rating the waiters when dining in the restaurant. A sample design for the user interface is shown in Figure 2.2.

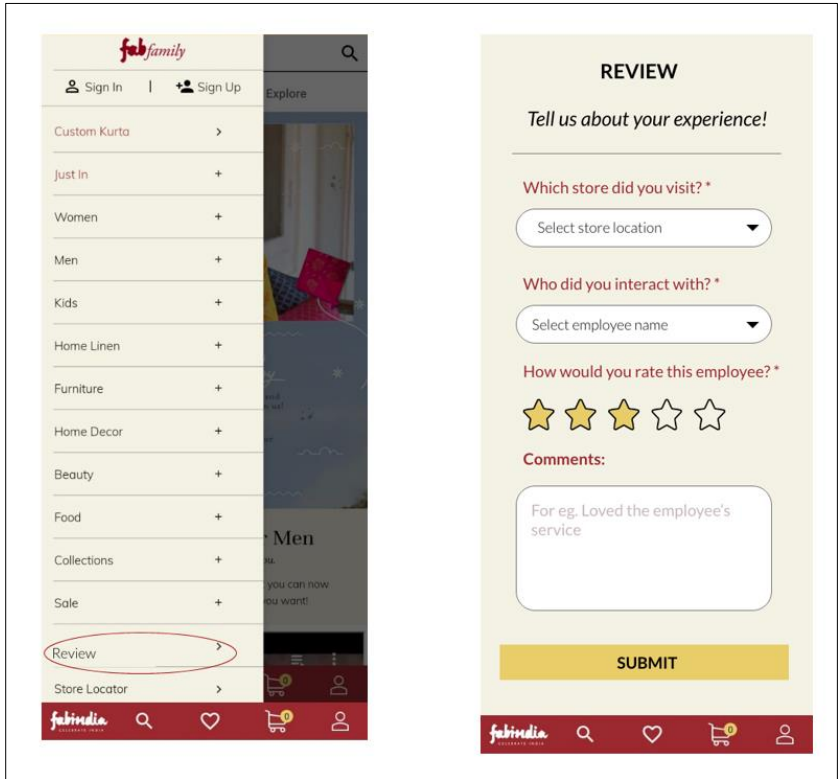


Figure 2.2: Figure for user interface of branch employee rating system

PROTOTYPE 2: CULTURAL TRAINING

The goal is to teach employees about the impact of unconscious biases, and help them avoid making quick, informed decisions based on past experiences and background. This involves raising awareness about the various biases that often arise towards minority groups due to factors such as class, gender, sexual orientation, race, ethnicity, nationality, religious beliefs, age, disability, and others. To address this issue, a new component called "Cultural Training" is being added as a requirement for all new hires. Figure 2.3 provides a sample illustration of the proposed user interface.



Figure 2.3: User interface for cultural training of employees

PROTOTYPE 3: DIMENSION GATHERING

This prototype focuses on dimension numbers for various measurements and getting them accurately by either of the two options. This will help Fabindia collect size data of their customers to manage their inventory accordingly. Figure 2.4 demonstrates a sample layout of the proposed user interface.



Figure 2.4: User interface of dimension measurement

PROTOTYPE 4: A COMMON USER INTERFACE

The idea behind this is to allow customers to store the body measurements of friends or relatives as profiles, which will help Fab India expand its inventory data. This way, when shopping for gifts, customers can choose whose dimension profile they need, eliminating the guesswork of sizing. The app's user interface would use the person's full picture to measure and determine the right size of the clothing item. A sample layout of the proposed user interface is shown in Figure 2.5.



Figure 2.5: Common user interface layout

PROTOTYPE 5: INVENTORY AND STOCK MANAGEMENT

At the billing counter, the barcode of the product is scanned, and the details get captured in excel and are notified to the inventory team and respective sales team. Post which the inventory and sales team can work together and restock it in the display. Figure 2.6 and 2.7 demonstrate the sample layout of the proposed user interfaces.

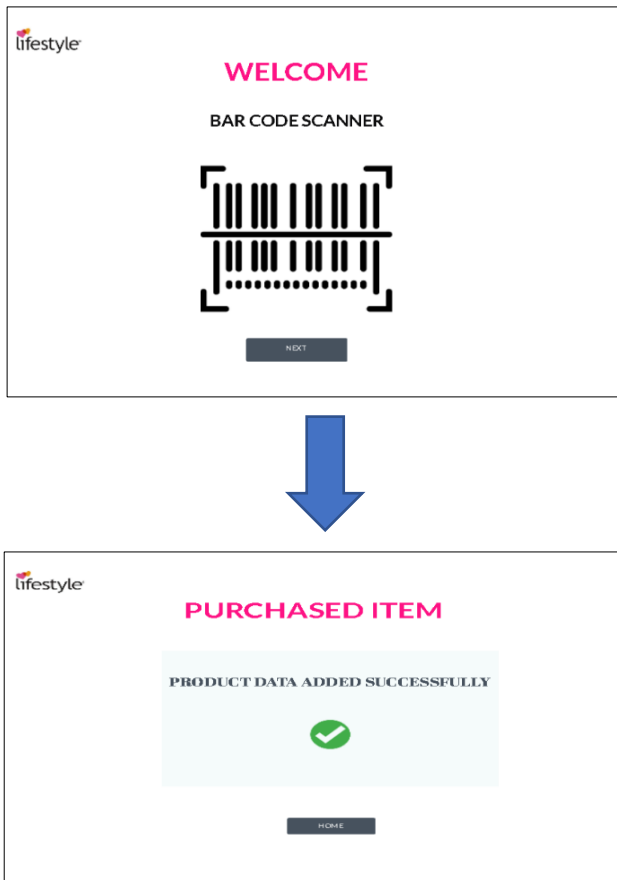




Figure 2.6: User interface of check out management using bar code

A	B	C	D	E	F	G
Date	Time	Billing counter no	Brand	Product ID	Product Size	Quantity Available
11.10.2020	11:29am	G1	AND	303400017	M	4
11.10.2020	14:15pm	G3	GINGER	409070000	S	5
11.10.2020	19:38pm	Desk - G6	ALLENSOLLY	100123900	S	1

Excel sample format:

Figure 2.7: An excel sample format of automated data collection from bar code checkout

PROTOTYPE 6: SMART MIRROR AT RETAIL BRANCHES

Enables customers to check out different product range available at the store. Figure 2.8 demonstrates a sample proposal of the proposed smart mirror which is augmented reality enabled. The customer can see how the apparel is going to suit him/her.



Figure 2.8: Smart mirror enabled apparel exploration at the retail store

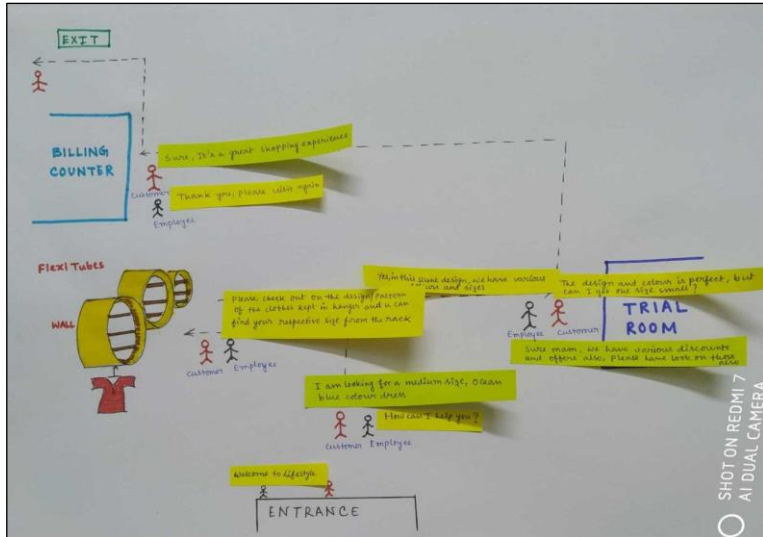


Figure 2.9: Design layout for flexible tube at retail stores

PROTOTYPE 7: FLEXIBLE TUBE

Flexible tube for showcasing the items instead of racks. Figure 2.9 demonstrates a sample layout of the flexible tube to be used for stacking the apparels.

2.5 Testing and feedbacks:

Results and feedbacks from testing the prototypes are mentioned below. Several categories of stakeholders' viewpoints are considered while undertaking the feedbacks.

Feedback from salesperson: This is new design layout which is also very interesting to attract customers. The workload of folding and arranging the clothes again and again would reduce drastically. Employees can focus

on other important tasks. Customers usually misplace clothes, and we must find them among this huge stock. This helps staffs to find and arrange the clothes easily though the customers misplace.

Feedback from store Manager

Appreciable idea and design. Potential to increase our customer experience. Need time for refurbishing the new design. Staff training required for installing AU enabled mirrors and handling them. We may need to appoint or allocate few workers for home delivery.

Feedback from customer

It can provide more walking space (flexi tube). Better visibility of clothes. AR machine will be a new experience for quick shopping by saving time.

3. CONCLUSION

This chapter demonstrates the application of design thinking in retail and fashion sector focused on managing the customers including crowd management as well as better shopping experience. The layout provided here can be helpful for any retail and fashion branches in better serving their customers.

DESIGN THINKING IN BANKING

INTRODUCTION

According to a report published by Digital Banking Report, banks and financial institutions typically do not take into account the human factor in the development of their products and services and tend to focus more on regulation. However, with the increasing number of financial products, some financial institutions are now starting to prioritize customer experience. With the rapid digitalization of banks, managing the customer experience in the digital space has become a critical priority. Problems such as a complex webpage design or mobile app, and failure during payment processes can negatively impact the customer experience. A recent survey on Indian banks and digital transformation found that digitalization can reduce costs and streamline processes, but also has a greater impact on the customer experience in the banking sector compared to other sectors like retail, healthcare, and utilities. The report argues that "improving the customer experience in banking should be the top priority."

It is important for Indian banks to address the challenges posed by the increasing number of millennial and Gen Z users of digital banking. At the same time, older individuals and those in rural areas may still prefer visiting bank branches. To cater to these diverse customer needs, banks need to offer an omnichannel experience. This chapter focuses on the customer-centric challenges faced by banks and the potential for banks to apply design thinking to improve both their online and in-person customer experience. Figure 3.1 highlights the key focus areas for Indian banks that require attention.

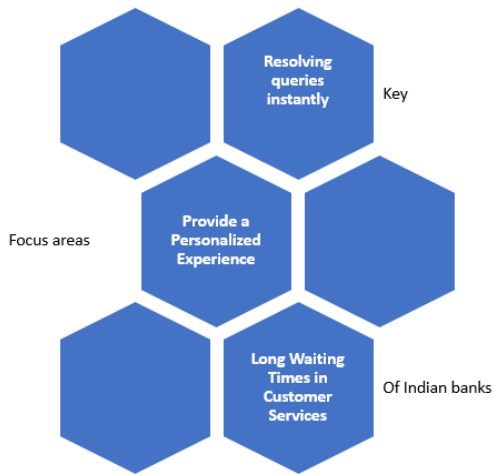
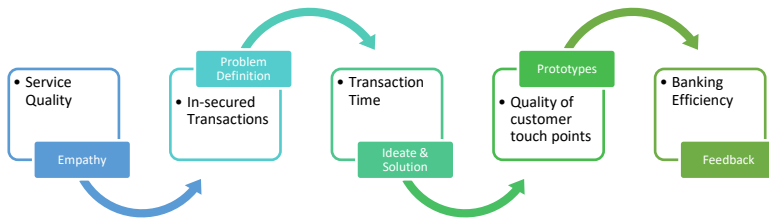


Figure 3.1: Key focus areas ahead of Indian banks

This chapter presents some case-based solutions on how design thinking can be applied to solve existing customer centric problems of banking institutions.



2 Case specific solutions

CASE 1: AXIS BANK

Axis Bank is considered for being one of the largest banks in India. Axis Bank is very much famous for its services in Banking field. Due to covid-19 we did this project online but somehow few of our members in group managed to go and visit the bank. Branches of Axis Bank are visited which are in different parts of the country such as Vapi, Bangalore, Chennai.

Observations and empathy drawing

1. Several customers were in the queue for loan approval purpose. Customers go to the branch to apply for loan and submit the documents.
2. The primary customers are in bank for long term financial products such as Fixed Deposits etc.
3. Managing the elderly people is important.
4. Significant number of customers visited bank for launching the cyber security issues (online frauds and OTP issues).

So, we designed the application where customers can see the rate of interest and offers for them online just on hands and apply for the loan without going to branch and submitting the documents online and verifying it with the branch representative online.

We came out with the problem of online frauds and OTP issue where customers are frauded with different kind of means so we came out with fingerprint linking with the application as we have linked to Aadhar card and retina scanner for payment as facial recognition.

Problem definition:

Solving the OTP issues during payments for customer in next 2 months by 15%.

Restructuring the loan process in next two months by 10%

Ideate and solution:

This section discusses the restructuring process of the loan application and approval process. The solution presented here goes in digital mode which customers can avail while at the bank branches even. Such human augmented digital processes can help in managing the queue.

For the online frauds and OTP issues related problems can be solved by introducing face unlock and fingerprint sensor.

PROTOTYPE

Following is the 2-D porotype of our application:

Unique about Porotype:

1. Easy steps
2. Online verification of documents through app
3. Easily get loan
4. Rather than OTP use fingerprint and face sensor.
5. Complete the process in few steps
6. Full loan process online sitting at home.

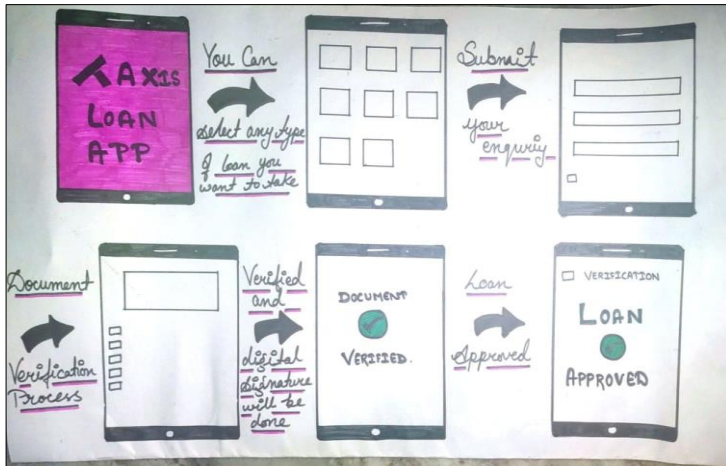


Figure 3.2: sample prototype of Axis Bank

CASE 2: HDFC bank

Empathy

Field Visit 1: Observations and Key Findings

Observation is the active acquisition of information from a primary source. It can be done by closely making the note of any activity, to someone or something.

For this Assignment different branches of HDFC Bank were visited. The observations led following empathy chart, exhibited in figure 3.3.

<p><u>Internal problem</u> Less number of employees High processing time</p>	<p><u>Facilities</u> Online banking ATM Net banking Credit card</p>	<p><u>Why HDFC</u> Good interest rate Large network of bank Trust factor</p>	<p><u>Employee problem</u> Less salary of employees</p>
<p><u>Other issues</u> Customer grievances Employees complain_</p>	<p><u>Employees pressure</u> More target to achieve in less time_</p>	<p><u>Communication gaps</u> Unavailable customer support Did not inform the customer about hidden charges</p>	<p><u>Staff behaviour</u> Helpful Kind Friendly Supportive</p>

Figure 3.3: Empathy chart of HDFC Bank

Problem definition:

Reducing the Personal loan application processing time from 5 days to 2 days in next 1 month at HDFC Bank

Providing a secure online experience to the customers

Reducing the time of banking transactions

Ideate and solutions:

The solutions are first brainstormed using design thinking tools such as SCAMPERS, AOK, divergent thinking etc.

Adapt, Online and Key activities:

Adapting the documentation process Pan India basis and using the technology software, website, and loan application with the latest innovations with using software which are beyond the banking industry standard will be

able to increase the working output. Doing above changes, the loan processing can be made efficient by working smart so that the bank can satisfy the needs of the customer.

Substitute, Eliminate, Soft copy, Customer relation:

Eliminating the load of unnecessary documents and forms for loan processing and substituting them with online application, document upload, requests/approvals etc. This can be done by smartphones, laptops, and desktops etc. so that the customer will not worry about filling long forms. This would also result in reduced cost of the paper, environment friendly and a sustainable approach towards increasing customer relations as they would perceive these steps are taken for betterment of their experience in the branch. Customers can easily fill in their loan application using the smartphones, laptops, and desktops from their home which would decrease the long queues, processing time and eventually lead to greater customer satisfaction.

Modify, combine, and value proposition:

Adding an extra loan desk in the branch for all queries and approvals that they may have from their bank would be provided through this platform. The Loan Application portal and HDFC bank website should be combined so that the customer can easily apply for loan from that portal by visiting bank website. This will help in reducing the average loan processing time of the customer as this has combined different portals into a single website which would save time of the customer and will lead to customer satisfaction by helping customer emotionally, physically as they will be getting the loans in lesser time. It offers the customers a dynamic of banking with more personal touch to ensure they are provided to their every need with best priority and efficiency.

Put to other use, Good, and Cost structure:

By giving training the employees with basic knowledge of daily banking working so that they can do daily banking activity as well as interact with

customers effectively and can explain them about the loan process. Good training to loan team will lead to Provide good Information to customer at the first meeting regarding required documents and loan process so that the customer can submit the required documents at one time to reduce the document processing time. When a third party/agency take the responsibility of document processing and collection then it will be easier for the bank to process the loan. It will reduce the legal charges, paper cost, document verification cost etc. and hence it will lead to customer satisfaction and retention.

Final few solutions selected

Solutions for problems 1

Here, the idea is to reduce the personal loan application processing time from 5 days to 2 days so that users can receive the service much earlier than before. The process is that, instead of providing all the required documents in physical paper form to the bank, the user can upload all such documents through the bank applications itself and the bank will verify and update the users within 48 hours about the status of the process.

Solutions for problems 2

To reduce the document verification process, bank will hire an agency for verification where the verification will be transparent and bank employee will get time to focus on other works.

Solutions for problems 3

Bank can use the Digi locker application to get the valid document of the applicant.

PROTOTYPE:

Idea to paper: The idea to paper demonstration is shown in figure 3.4.

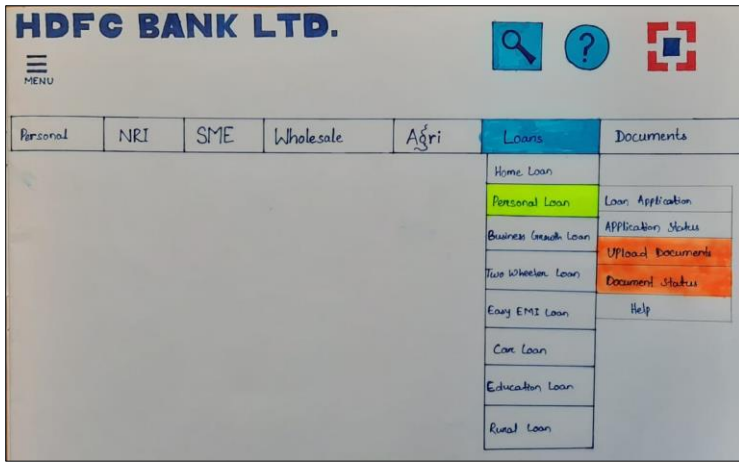


Figure 3.4: Idea to paper exhibition

Paper to Model: In figure 3.5, the paper to model development is exhibited.

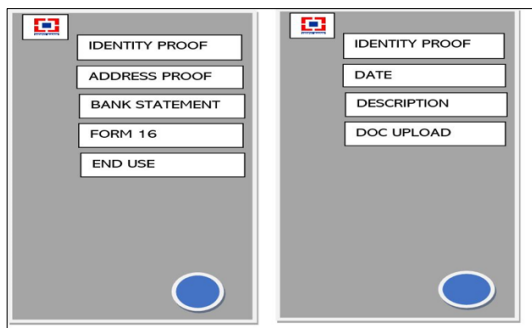


Figure 3.5: Paper to Model exhibition

Model to Business:

The next stage involves model to business which is demonstrated in figure 3.6.

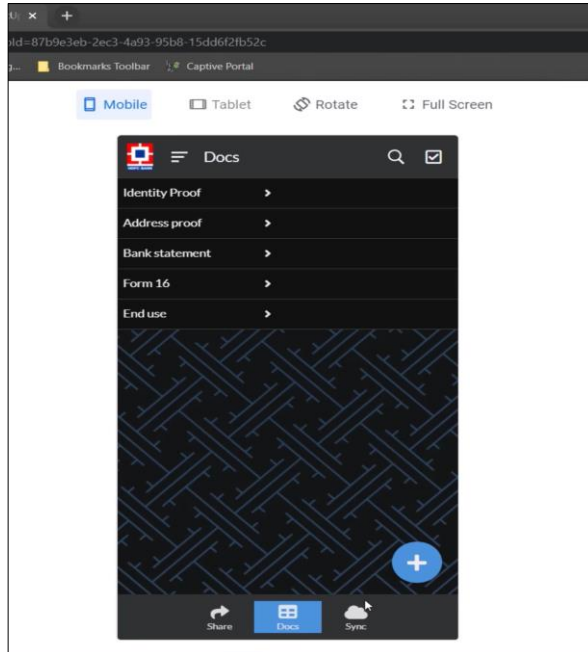


Figure 3.6: Model to business exhibition

Testing and feedback:

We hope that a person will get personal loan within 2 days sitting in home without going to bank as he can directly upload his documents online to bank and his verification will be done online by bank making the whole banking process easy for both customer and employees.

The feedback from organization that we received after we presented our Idea was that they really liked our presentation and appreciated our effort and they have taken it as a consideration and will discuss about this project if the management agrees with the Idea.

CASE 2: SBI

SBI is one of the oldest banking institutions in the country with the greatest market share. Personal experiences at the bank further motivated our group to select the bank to improve the efficiency of the bank. Largest customer base in the country and can really use the increase in efficiency of daily working processes. Being the largest bank of India, has huge potential to be better. The number of resources SBI has at its disposal and the trust it has generated in the mindsets of its customers is a great advantage for the organization which can be used to be the best banking institution of the country.

Field visit and empathy building

Many customers who were interacted with in the past have complained about the sluggishness in daily banking service along with huge waiting lines and heavy amount of physical documentation for simple requests and procedures. Instances of rude behaviour by some of the staffs or delay in processing the requests of the customers. Improper or less informative response to queries asked by the customers over the counters. Multiple checks to approve single cheques of customers increased the processing time. Customer moving from one counter to another constantly.

Frequent server failure and unresponsive YONO app of SBI. Other pointed out that the account opening process is tedious and slow processing of requests.

Some of the communication pointed out by the customers were:

- Unavailable customer support
- Did not inform customer of hidden international remittance.
- Lack of communication and coordination between staff of the same branch.
- Constant reiteration of problems faced by customers on different window tills in the same branch.
- Inter-cum-Intra city communication channels are weak.

Problem definition:

Problem statement 1

- How might we improve the daily in branch banking experience of the customers by decreasing the average banking time from 20-25 minutes to 15 minutes in 1 year?
- Pains of the stakeholders
 - Long waiting time for daily banking needs like transfers, remittance, loan information, request approvals
 - Unnecessary documentation process
 - Multiple touch points

Problem statement 2

- How might we rectify logistical drawbacks like delivery delay/misplace of debit cards, inter- branch documentation transfer or passbook delivery that the customers are facing?
- Pains of the stakeholders
 - Delay in delivery of debit cards or cheque books
 - Inter-bank transfers of account delayed due to slow logistics
 - Approval from different branches or head office takes time
 - Huge amount of time to transfer any physical document or data

Ideate and solution development:

- Solution for problem statement
 - Solution generated using lateral thinking, divergent thinking and SCAMPER model.

- Adding a single extra assisted daily banking counter to meet the needs of the people like daily wage earners who are not comfortable to use the tablets. Also, adding a tablet kiosk for daily banking customers like merchants, traders, businessman and even the salaried individual. Training the support staff in the bank so that they can address the common issues faced by the customers.

- **Reason for selecting the solution for problem statement 1**
 - Easy to deploy, can be incorporated in existing floor plans of branches
 - Will save long queues on the teller counters
 - Will make the process of daily banking paperless and sustainable
 - Completely online process will decrease the multiple touchpoints and also decrease the average banking time of an individual.
 - The tablet will also give necessary information about the products of the bank
 - Can avail facilities like E-insurance that are offered by SBI

The solution can be easily incorporated into the bank's existing online interface and can be accommodated in branches through infrastructural changes. The size of the tablet kiosk will be comparable to 2ft wide gym lockers for storage, and adding a single assisted daily counter in branches would improve efficiency. The support staff will be trained in basic banking knowledge, interpersonal and communication skills, as well as tablet maintenance, to help daily banking customers with normal queries and issues. The average interest income earned by a small-scale branch is Rs.30.34 lakh, which is enough to cover the cost of the infrastructural changes by at least three times, making the solution financially feasible.

Prototype 1- Floor plan of a typical bank branch

- The floorplan accommodates the addition of tablet kiosk and only 1 assisted daily banking counter in the existing floor plan
- Accessibility is high as it's on the entrance of the branch itself
- Trained support staff stations in the vicinity of the additional counters for help
- Kiosk station will be maximum 2 ft wide so that it can be accommodated easily in any branch as shown in figure 3.7.

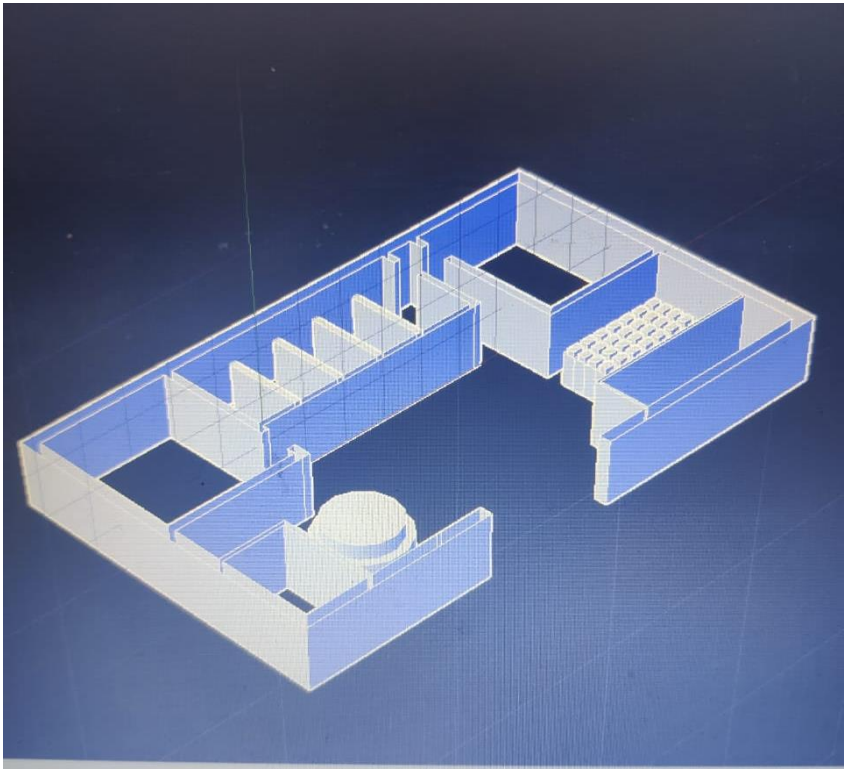


Figure 3.7: Kiosk demonstration

Prototype 2- Interface of the tablet

- Simple and easily accessible interface.
- Can login by using OTP for security of the customer.
- Availability of daily banking needs on a digital platform and can be accessed whenever the customers are visiting the branch.
- Removing multiple touch points in bank which helps in reducing the average banking time and also increase the efficiency.
- Faster processing as all the process area done digitally and removes the hassle of communicating with the branch personnel
- Paperless, a sustainable approach towards future and also reduces overhead costs.
- Sample demonstration is exhibited in figure 3.8.

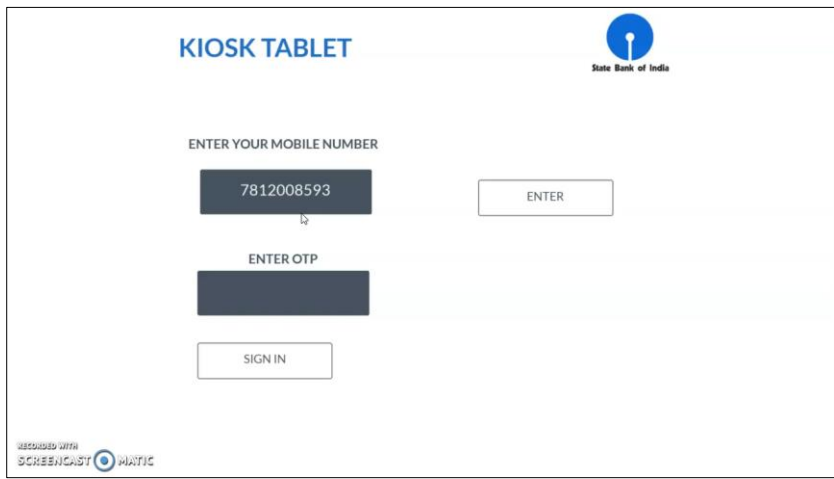


Figure 3.8: Kiosk tablet sample demonstration

Prototype 3 -Training module of support staff

- 2-week training for support staff
- 1-week course for tablet use and maintenance
- 2-week module of Introduction to banking to train the support staff with basic banking functions
- 1-week training of interpersonal and communication skills

All the modules will run side by side to save time and resources for SBI

- Train them in using the tablets and its functionalities so that they can address the issues that will be faced by the customers.
- Also, the support staff will learn the basic maintenance of the tablet.
- Acquaint them with basic daily banking functions so that they help customers with basic queries
- Teach them interpersonal skills so that they treat the customers better and increase the customer relationship.
- Module would include:
 - Introduction to Banking
 - Practical courses for resolving tablet malfunctions
 - Module to train regular maintenance of tablets

Test and feedbacks:

The prototypes were tested and following are the feedbacks received from different stakeholders:

Branch Manager

- The solution will achieve the reduction in time, but few customers might not be technologically ready.

- Capital requirement would be huge and will require periodic in flux.
- Training the support staff should be shortened.
- Shortage of manpower, requirement of hiring new people will again cause problems so train the existing staff.
- It will enhance both staff and customer experience due to reduced time and their interaction.
- Dedicated space requirement for the kiosk will be another problem for crowded branches so reduce the size a little more.
- It will surely make SBI tomorrow ready.

Based on the above feedback from the branch manager followings are the necessary changes made to the solution proposed above:

1. We reduced total number of assisted counters to 1 from 2 and reduced the size of tablet kiosk.
2. Decreased the time of the support staff training from 1 month to 2 weeks with overlapping courses to save financial resources and speed up the implementation of the solution.
3. Increase the time of the solution implementation from 6 months to 1 year so that its easily implemented and is not rushed keeping in account proper review time in between for any necessary changes.
4. Made the interface of the tablet more secure by using OTP login and removing features that were not in line with banking regulations.

Conclusion:

In conclusion, design thinking has proven to be a valuable tool in the banking sector, allowing banks to create solutions that are tailored to the needs of their customers and the challenges faced by the organization. By using empathy, collaboration, and iteration, banks can create customer-centric solutions that improve the customer experience and drive business growth. Design thinking provides a structured and human-centred approach to problem-solving that enables banks to stay ahead of the curve and remain competitive in an ever-changing market. Overall, design thinking is an important aspect of the banking industry, and its use will continue to grow as the need for customer-focused solutions becomes increasingly important.

DESIGN THINKING IN ECOMMERCE

1. INTRODUCTION

Modern shoppers including millennials, Gen Y and Gen Z are driven by experience. Modern shoppers are also always on the lookout for fresh experiences. With the rise of e-commerce, the need for improving customer experience has evolved drastically. E-commerce platforms are no longer associated with the online payment and delivery options. India has witnessed the growth of e-commerce giants like Amazon and Flipkart who serves millions of online customers daily. There are several other ecommerce platforms in Indian which have also entered this market space. With high penetration of mobile internet, ecommerce business in India has also grown significantly. These platforms have made things available on the consumers' fingertips. In the figure 4.1, the growth pattern of Indian Ecommerce sector is shown, as reported by India Brand Equity Foundation (IBEF).

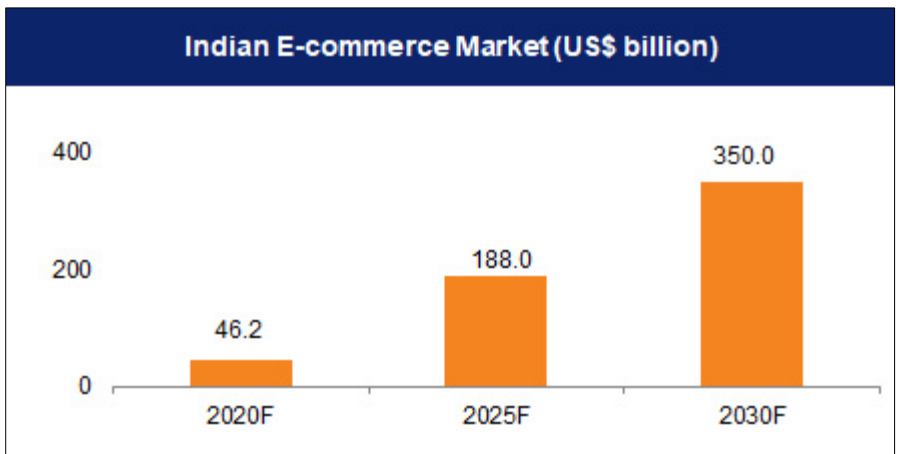


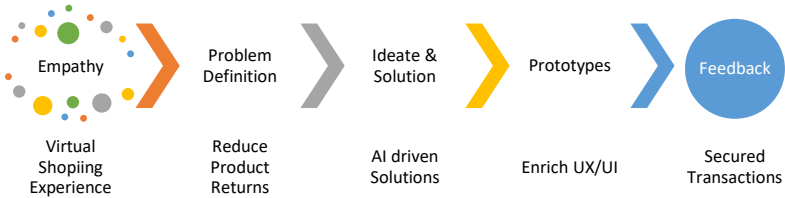
Figure 4.1: Growth forecast of Indian Ecommerce

Nonetheless to say, such fast rising sector is also becoming increasingly competitive. This is relevant to mention that there are different types of

Ecommerce platforms including B2C, B2B and D2C. Here, focus is given particularly on Ecommerce platforms based in B2C segment. Consumers are in continuous demand for a seamless and engaging buying experience irrespective of the platform. The highly intensive challenge of user centric interface and creating an experience for retaining the consumers back to the e-commerce platform is common challenge to every e-commerce platform. Moreover, consumers have increasingly become picky about their apps. Due to availability of several ecommerce platforms, consumers often have multiple apps installed in their phone. According to research by CleverTap, a market survey company, 42% of users uninstall an app after 30 days, and there's only a 5% chance that the same user will re-install your app once it's off their phone. Hence retaining consumers have become challenging for the ecommerce platforms.

Three different categories of ecommerce platforms are chosen: Myntra, Amazon and Dunzo. Myntra is a fashion-based ecommerce platform, Dunzo is grocery-based ecommerce platform. Amazon is an ecommerce platform which has evolved to become a marketplace. Understanding application of design thinking at three different ecommerce platforms are helpful for the readers to understand the customer dynamics at different target level ecommerce platforms.

This chapter presents some case-based solutions on how design thinking can be applied to solve existing customer centric problems of ecommerce.



2 Case based application of design thinking:

Case 1: MYNTRA

In Myntra case study, focus is on providing better user experience to the customers while reducing the return rate at company front.

Key observations and empathy:

Rounds of interviews with different level of stakeholders including Management, Customers, Employees, Delivery partners are conducted to understand the scenario if Myntra delivery system.

Following are the key empathy areas identified:

1. Reduce the gap of online and offline shopping experience.
2. Save time and unnecessary cost in this process.
3. Creating a unique personalized shopping experience for the users.

The insights we developed from the interaction of different stakeholders and our own experience are as follows:

- Mismatch of products in size and color
- Difference in physical appearance
- Due to extensive collection of products, it takes longer time to select a product
- Complexity in filtering product

Problem definition:

- The problem definition is as follows:
- Reducing the return rate of products by 60%.

- Optimizing the selection procedure to deliver the perfect choice for the consumer.”

Ideate: and prototype:

By analysing these problems and after several brainstorming sessions using scientific techniques like SCAMPER and Creative thinking, we came up with few solutions which are as follows:

- Using Augmented reality to create a virtual image of how the product looks in customer’s appearance.
- Artificial Intelligence (AI) based fashion stylist chatbot.
- Description of materials used in the product.
- Grading of materials like leather and fabric.
- Search optimization using image processing.
- 3D mapping of user to create a personalized wardrobe.

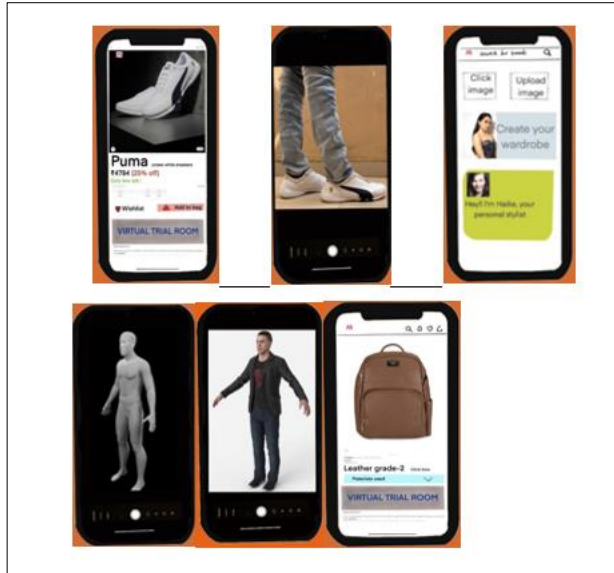


Figure 4.2: Demonstration of the prototype

PROTOTYPE: VIRTUAL REALITY ENABLED TRIAL ROOM IN MOBILE APP

This prototype design proposes a virtual trial room where customer can see how a particular dress is going to fit on him/her. A sample design layout is presented in Figure 4.2. The algorithm for virtual reality enabled app would be able to capture the measurement and properly fit the garments or shoes or glasses etc.

Testing and feedback:

Feedbacks are received from various stakeholders of Myntra including sales manager, customer, analytics team member of Myntra etc.

Followings are the feedbacks received from them:

- The overall idea is good and appreciable.
- Myntra will come up with virtual reality technology in near future.
- And when coming to the issues regarding material quality it may be very cumbersome to display every detail and gradings. The better option would be the reviews posted by the customers itself where they would get a clear idea.
- The AI integrated chatbot is a good one, but for that creation of database and servers and seamless integration to the application and all technical matters requires huge R&D.

Some of the limitations identified for the derived solution as received from the managers are following:

- Slight inaccuracy may arise in results when using different devices, Myntra must be careful of such scalability issues.
- Collecting and recording of the data for the materials used is time consuming.
- Consumer should be ensured that their measurements taken are not shared with any other third parties.
- Privacy issues – since we take the photos of users some user may refuse to share this information.

The above feedbacks convey that the proposed suggestions can be implemented.

CASE 2: DUNZO

Dunzo works on one principle: getting your task done in the quickest possible time. It became the first company in India that Google invested in, putting up \$12.3 million. Partnerships with a variety of restaurants, grocery stores, pharmacies, pet supply stores, meat shops, etc. Dunzo focuses to reduce the cost per transaction, and that can be done by reducing the time taken in reaching a pickup point.

Field visit and empathy:

The pains of the customers or stakeholders are whatever they are ordering from Dunzo, they are charging it uniquely. The unique way of charging is for every 4km is ₹ 40, which is distracting more and more numbers to pay such a high amount of delivery charges for single order delivery. Even the delivery hours are more as compared to the amount they are charging. Even after charging such a high amount the packaging, the quality of the foiling of the product is not at all good is what we got to know from the insights of the problem statements.

The delivery problem remains a huge problem for Dunzo because, during our questionnaire, people responded more to the delivery and charging issues, as their view was that why should we order from Dunzo when the delivery and surge fees are so high and they are even charging for kilometers wise. The unique way of charging is for every 4km is ₹ 40, which is distracting more and more numbers to pay such a high amount of delivery charges for single order delivery. Even after charging such a high amount the packaging, the quality of the foiling of the product is not at all good is what we got to know from the insights of the problem statements. After all these pros and cons we discussed as a team, what could be the solution for it, and what suggestions and ideation we get from the ice-breaking sessions and group discussions were that one unique order processing model can be developed by merging the products and orders. Figure 4.3 exhibits the empathy chart.



Figure 4.3: Empathy chart for dunzo

Problem definition:

The problem is related to logistics and can be solved through the proper supply chain and logistics data rate analysis. The problem is too broad.

- The company can merge two order options to reduce the costs and give consumers an attractive option to call more options.
- The company can introduce medicines and grocery options together similarly or can add food and other options together and can give discount options to attract bookings.

The pains of the customers or stakeholders are whatever they are ordering from Dunzo, they are charging it uniquely. The unique way of charging is for every 4km is ₹ 40, which is distracting more and more numbers to pay such a high amount of delivery charges for single order delivery. Even the delivery hours are more as compared to the amount they are charging. Even after charging such a high amount the packaging, the quality of the foiling of the product is not at all good is what we got to know from the insights of the problem statements.

- The company can merge two order options to reduce the costs and give consumers an attractive option to call more options.

- The company can introduce medicines and grocery options together similarly or can add food and other options together and can give discount options to attract bookings.

Ideate:

This is the first time that a company will introduce a multi-product delivery system for the same consumer. Also, this will change the delivery time, drastically cutting it in half according to our calculations. This is because 1 order is doing the job of 2. The customer does not require to make another order to fulfil their needs. The solution is not too cost consuming as it does not require physical infrastructure but only on the software side. The solution is data-driven and will develop with technology.

Characteristics of Solution:

- Scalability: The solution is as scalable as the company's reach. It can be applied in any market where Dunzo is already or will be functioning.
- Sustainability: It will be consumer dependent. If the customers are not willing to adapt to a multi-product order system, then this solution will not sustain that specific market.
- Feasibility: With only some R&D and data management this solution can be applied throughout the market. A strong software development team will be required for the various tasks.
- Viability: The solution is viable in any situation as it is very versatile.

Final Solutions Selected:

The problem which we found out mainly from our questionnaires, empathy canvas, personas, and journey map that most of the users are facing the problem of high surge charge fees. The delivery problem remains a huge problem for Dunzo because, during our questionnaire, people responded more to the delivery and charging issues, as their view was that why should we order from Dunzo when the delivery and surge fees are so high, and they are even charging for kilometre wise. This is the reason why most of the users are not even ordering from Dunzo, whereas the other applications and

companies providing better delivery facilities with minimum delivery charges. The people responded that at times the delivery charges are more than the product cost, and so we as a team noted down and rounded off this problem.

The prototype suggests to us that the customers are facing huge surge charges, like for every 4km they are charging ₹ 40, in the same way, they are charging ₹ 80 for 8 km. So, we as a team developed a model where mercerization of the order will take place.

The mercerization will be done by the following steps:

1. First, the order will be placed using the mobile application, desktop online page.
2. At the same time, if a person orders two items or products from the same geographical area or radius then the system will work there, and the order will be processed then.
3. First, the ordering will take place then the company will process the order by looking at the quantity and the locations.
4. Next step the company will look for agents within the nearby geographical locations by driving the search facility.
5. As soon as they will get the agent near to that location, further processing of the order will take place and the delivery requirements details will be pass on to the agents.
6. The agent will move to the shops to pick up the orders and straightway will drive back to the delivery.
7. The agent will make the final delivery after validating all the checking and process fulfilment.
8. The agent will then move to the delivery location and hand over the products to the customers using this way delivery surge charge will be reduced and enhance the customer base.

The model will help them to enhance the services and will help in pulling the crowd to Dunzo as this will be the first time where a company will produce two orders at the same time with limited time and fulfilment of requirements.

PROTOTYPE:

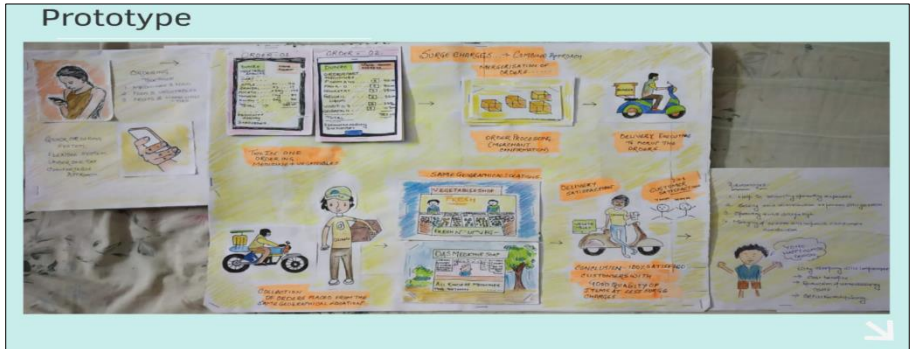


Figure 4.4: Prototype development

The prototype suggests to us that the customers are facing huge surge charges, like for every 4km they are charging ₹ 40, in the same way, they are charging ₹ 80 for 8 km. A sample prototype is demonstrated in figure 4.4. So, we as a team developed a model where mercerization of the order will take place.

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- The agent will then move to the delivery location and hand over the products to the customers using this way delivery surge charge will be reduced and enhance the customer base.

Testing and feedback:

The financial analysis is that the company's balance sheet will improve as the profit will improve the equity share and will reduce the debt structure of the company. The leverage of the company will reduce and the cost of equity will reduce and will help in the market resurrection. The debt fixed interest will reduce and the same amount can be invested in some other growth prospects. It does not have an IPO in the market so reserves will improve for the futures growths and development. The cost sheet effect will show that the company break-even position will improve and as the profit share will improve, simultaneously contribution margin will increase more, and the breakeven point could be reached sooner. The cost of implementing the project will be less as significantly the traveling expenses, agent costs will be reduced and only the major costs will be taken for better data facility and some minor application and UI developments. The models will improve the customer's user experience and the model will uniquely help them to fulfill the orders in very little time. The ratio will not truly show the picture of the company but still, it will show the liquidity effects on certain departments like operating ratio will go down as the operating cost will go down significantly. The profit earnings ratio will also improve as the company's overall profit margin will grow higher in the future. The company's valuation will also increase when its IPO will be launched in the market.

CASE 3: AMAZON

Field visit and empathy:

INSIGHTS FROM THE FIELD VISIT

1. Despite being a loss incurring proposition, Amazon has invested around 2000 crores and continues to fund it further
2. Amazon is not focus on the loses as they are determined to expand rather than keeping an eye on profitability
3. Heavy investments have been made on Amazon seller services as well
4. New notifications or laws brought in by government put regular and severe pressure on the operating structure of Amazon
5. Consumers and sellers ignore the importance of product review and seller feedback on the platform
6. Changing sales tax laws forces Amazon to be more active to cater to both consumers and sellers with equal efficiency
7. Customer returns is one of the most important factors of the losses incurred by Amazon. People tend to take advantage of the customer friendly policies introduced by the platform.
8. Wastage of products that are returned or deemed low quality.
9. Amazon has become stricter with their category restrictions over these past years to ensure safe and no counterfeit products.
10. For Amazon Prime, the primary reason for initial interest when looking to purchase the subscription was free/fast delivery
11. Gradually the interest diverted towards benefits like Amazon prime video and prime music
12. Increasing frequency of shopping online and lack of loyalty to a particular platform are the key reasons of introducing Prime facility
13. Prime went on to be a big hit in India as prime members reported significantly higher customer satisfaction
14. Amazon India started its payment business mainly to reduce payment failures and issue refund to customers during return of product
15. Amazon Pay is now competing with the likes of Paytm, Google pay etc.

16. Amazon has recently onboarded merchants like Swiggy, BookMyShow, etc. for easing utility payments
17. Amazon encourages its customers to use its payment platform to ensure that the data of the customers stays within the ecosystem of the company
18. Amazon is expanding to offline means of payments using QR codes with its investee company Tone Tag
19. Amazon is an experimental company that is always trying to come up with new projects for the customers
20. Amazon governs on set principles which it looks for in its employees
21. Amazon is a rational organization which maintains balance between authority and responsibility delegated to its employees at each level
22. Amazon provides lucrative incentives to its employees
23. Amazon has gone out of its way to provide for its customers during this pandemic Covid19 unlike other organizations.
24. Amazon is facing losses in India due to the consumer mindset of shopping from local stores.
25. Another major reason for the financial liability of Amazon are the government rules and sales tax laws stated by the country.
26. The heavy investments made on various new projects that have not turned fruitful make it hard for the company to yield profits in the short run.

PROBLEM STATEMENTS AND THE REASON FOR SELECTING IT

1. How might we reduce the financial losses faced by the investors by 4% in the next 3 months.

Insights-

a) The US-based ecommerce giant's losses in India stood at over INR 7000 Cr for FY 18-19.

b) Amazon is investing in the Indian markets heavily to create a loyal customer base in this huge market.

c) The heavy investments made on Amazon seller services as well as various other new projects that have not turned fruitful yet make it hard for the company to yield profits in the short run.

2. How might we reduce the number of fake products and unethical returns being made by customers by 7% in the next 3 months.

Insights-

a) There are ineffective product checks made by the company in terms of authenticity of the product.

b) Returns made are not always properly analysed before transferring refund, this causes losses for the company.

c) There is reportedly a lot of manipulation and mismanagement happening at the ground level.

3. How might we increase the work life balance for the employees at Amazon by 15% in the next 3 months.

Insights-

a) Amazon needs to improve on the work life balance that it allows its customers to be a dream organizational structure.

b) Amazon governs on set principles based on which it judges its employees, making it hard for employees to feel a sense of liberty.

c) Amazon is a gigantic company, so the projects and the deadlines are very, very rigorous. You must work a lot and be on your toes 24/7 to be able to deliver the task.

Ideation of the solutions

In the Solution phase where we have thought and brainstorm ourselves to bring out the Best useful product, there were many thoughts and processes. Few made some senses, and few was not because it started from a various thought process to bring out the correct solution for the easy and better outcome through various design thinking processes.

We thought of various ideas and brought many together.

Our Solution is unique as it conducts a friendly atmosphere in the organization.

It is extremely engaging, practical, hassle free and aims to make work recollection easy.

We have created an application for better employee engagement and performance evaluation?

- Scalable: Employee performance Evaluation
- Sustainable: Practical, creates long term employee relationship and it is Technically updated.
- Feasible: Low Investment, created Inhouse
- Viable: Hassle-free and it tends to motivate employee to perform better.

Another Solution we also took into light was the unethical products or first copy products sold by sellers to the customer. These made a defamation of the Brand Amazon as this is the platform where products were sold but was not original. So, these are the things we kept into consideration and went forward to bring up the solution. There were many hit and trial method to gain a good prototype but ultimately, we got into one.

Loads of Brainstorming was done to get the output in a sustainable manner. To create a professional approach to the solutions and which shall bring sustainable outcome and solution.

Modifying the existing product policy with retailers and making stricter clause against unauthentic products being sourced and sold on the platform. There were many:

- Scalable: It can be measured through financial accounts.
- Sustainable: Increase customer's trust in brand and hence build customer loyalty.
- Feasible: Since AMAZON takes responsibility of unauthenticated products.
- Viable: NOT VIABLE, it will lead to unemployment as if we start eliminating sellers then we might lose their income, and this shall not create value for the customers.

There we thought of many products and solution to bring up changes but not all can create value and bring better outcome, few solutions made us to eliminate sellers and another outcome was to stop returning wrong products where it was not in our hands to make customers aware to stop returning different products and be ethical.

Prototype:



Figure 4.5: Prototype demonstration for Amazon

- Here we ideated through various options and needs in the company, where we realized Employee satisfaction will bring out best potential in the company.
- It was challenging to get insights and bring up a model but that is why we have chosen this topic.
- we have created a prototype of an application where employees can get their daily activity planner and can check their status or score of their performance. There is also an option where employees can feedback of peer employees and makes it a better potential place.

Testing and feedback:

feedback on Amazon's design thinking prototype testing focus on evaluating the usability, functionality, design, user experience, and potential improvements of the prototype. We received positive feedback from an Amazon customer relationship manager, warehouse manager and clients. This feedback will help Amazon's design and product teams to iterate and improve their designs, leading to a better final product.

3. Conclusion

In conclusion, design thinking is a valuable approach for ecommerce companies looking to create user-centred and innovative products and experiences. By understanding customer needs, generating and testing prototypes, and continually iterating and improving, ecommerce companies can ensure that their products meet the needs and expectations of their customers.

The prototypes developed in this chapter can help ecommerce companies to stay ahead of the competition and drive customer loyalty by providing unique and user-friendly experiences. Additionally, by incorporating design thinking into the development process, ecommerce companies can reduce the risk of developing products that are not well-received by customers and ultimately improve their chances of success.

DESIGN THINKING IN FOOD AND BEVERAGE

Design Thinking is gradually being incorporated into the food industry's value chain. It can be utilized to understand consumer perspectives and needs in various areas of the sector. The food and beverage industry encompasses not only the production and sale of food products, but also the food supply chain, dining experiences, and the increasingly popular food delivery system. With the growing number of businesses in this sector, design thinking can help companies stay competitive. In this chapter, we demonstrate how design thinking can be applied to enhance food delivery services offered by companies like Domino's and McDonald's. This includes reducing delivery times, improving

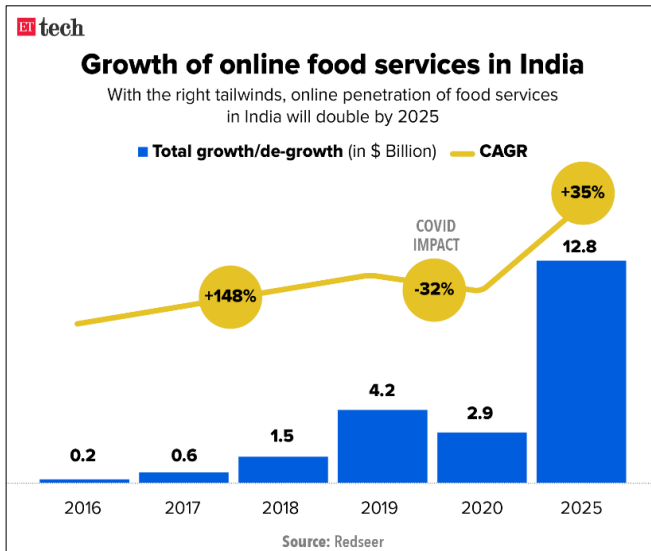


Figure 5.1: Growth of Indian online food delivery service

employee efficiency in busy food establishments and enhancing customer experience through chatbots. The food delivery service was selected for improvement due to its high demand and growth, with the Indian online food delivery market reaching a value of nearly USD 7.4 billion in 2022 and showing a year-on-year growth of 100% over the past three years. This growth is expected to continue and even double by 2025, according to a recent report in the Economic Times. Figure 5.1 exhibits the growth of online food delivery services in India.

Delivery services in the food industry can be categorized into two types: restaurant-to-consumer and platform-to-consumer delivery services. In terms of food ordering methods, it can be divided into two categories: mobile applications and websites. With India's rapidly growing internet penetration, there has been a significant increase in the use of mobile applications for food delivery. Currently, there are numerous mobile apps competing against each other in the food delivery market.

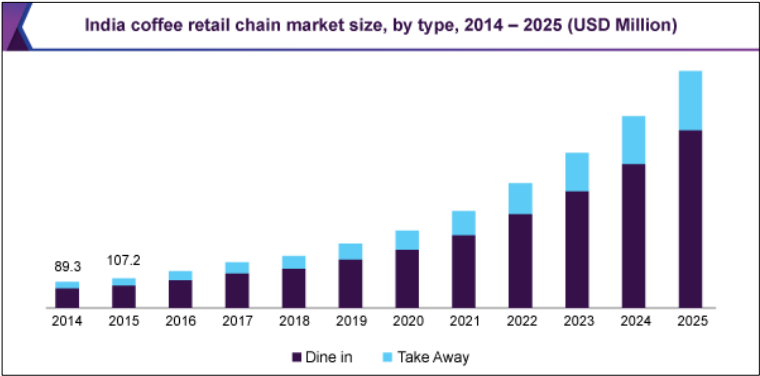


Figure 5.2: Growth of coffee retail chain in India

Into the beverage sector, there is a steep rise in the popularity of coffee among the millennials and Gen Z. As a result, cafes are opening here and there which makes the café business competitive. In the figure 5.2, the growth of coffee retail chain market of India is shown. This is taken from the market

report published by Grand View research, a leading market research firm. While this sector is forecasted to grow further, customer experience is not always met at the expected level. In this situation it is critical to thrive through the competition. This chapter discusses how design thinking can help in providing better experience to the customers at these coffee retail shops.

Considering the competitive scenario at food and beverage sector, this chapter discusses how design thinking can be useful in solving the challenges of food and beverage sectors through some cases.

2 CASE SPECIFIC DESIGN THINKING-BASED SOLUTIONS:

2.1 CASE 1: DOMINO'S

From online ordering and leading point-of-sale technology to partnering with the best advertising agencies and maximizing our purchasing power, Domino's continues to shape and drive the pizza delivery industry. Today Domino's is a food company, tech company and food-tech company. The share of online food delivery via Domino's app is at par with Zomato and Swiggy (India's leading online food delivery apps).

Observations and empathy drawing

Field visits are conducted at different branches of Domino's for deep observations and drawing empathy chart. Followings are the key points of observation:

- Domino's has its own delivery services and Swiggy and Zomato are also available for delivery.
- Variety of soft drinks are not available.
- Some of the topping's items are missing.
- Some orders are delivered late which made customer unsatisfied.

- Some customers are disappointed due to unavailability of variety of soft drinks.
- Less number of employees are present to take orders.
- There QR scan was not working which caused problem to many customers.
- A complaint was raised by the customer regarding orders by the employees are taken late but no one followed up.
- The network inside the store was weak so many online payments are cancelled.
- Payments are taking longer time.
- Virtual customer assistance was available.
- No contact delivery was practiced.
- Online orders are taken.
- Once the food was cooked it was checked.
- Wearing mask and gloves was a must for every employee.

From the above observation points, the empathy chart can be drawn. Followings are some key points of the empathy chart:

Common stakeholder perspective:

- Domino's is well established.
- Trust because of good quality of pizza.
- Wide range of pizza are available.
- Offers customized pizza.
- Availability of various discounts and offer.
- Delivery system is reasonable and can be better.
- Need to be active with their ad campaign.
- Need to promote their no contact delivery.

Reason for discontinuing Domino's:

- Delay in delivery.
- Chaos and confusion due to less no. of working counters.
- Parking facilities for four-wheeler are not sufficient.

Communication gap from the store side:

- Change in opening and closing time of domino's outlet are miscommunicated.
- There was less coordination among the staff members.
- Lethargic response time in case of any complaints.

Problems faced by the customers:

- Some of topping items are missing.
- Limited numbers of employees are present to take orders.
- As per the customer dominos should improve online marketing.
- Customers are not satisfied with delivery time.

Problem Articulation & Ideation

The above-mentioned points lead towards defining the problems at Domino's front. Keeping into mind the empathy towards all the stakeholders, followings are the

1. How might we improve the delivery system and make it more efficient by keeping up to the promise of "30 minutes or free" (Domino's Branding)
2. How might we make the workforce (Employees) permanent or keeping them for a longer term as the employees working in the outlet are there for a short term and not for a longer term.
3. How might we introduce better replacement rather than providing free pizza to the customers and incurring a loss, if delivered 30 minutes late.

The delivery system (delivery of the order placed by the customer of Domino's) is the backbone of the business as Domino's has positioned itself as a brand of food chain which promises the delivery time of the order to be 30 minutes (30 minutes or free)

List of solutions generated through ideation phase:

- Introducing Drones into the delivery system of Domino's

PROTOTYPE:

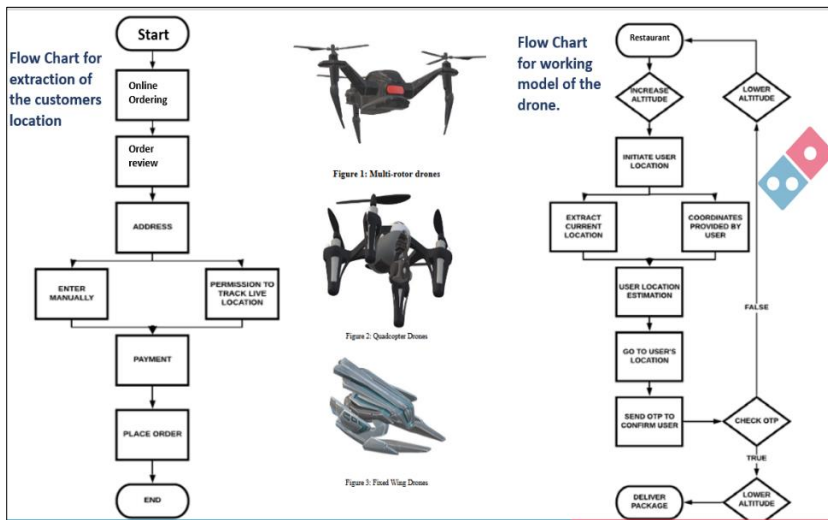


Figure 5.3: Flow chart of drone-based delivery service

Above is the flow chart for the drone-based food delivery services, as depicted in figure 5.3.

Testing:

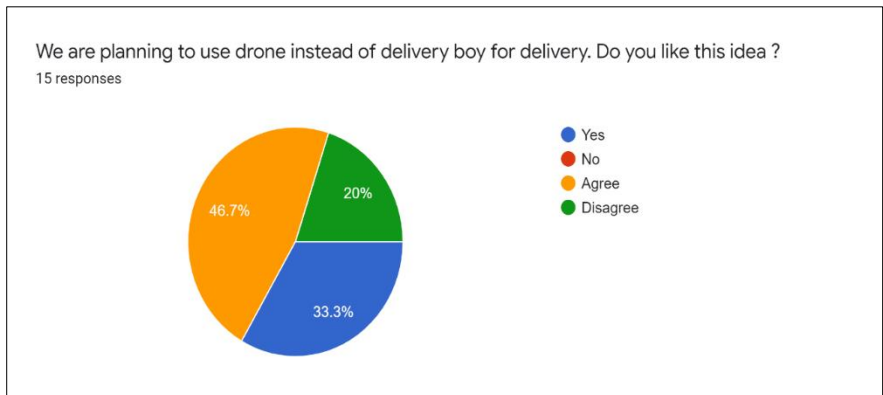
The customers are excited and happy about the idea as it is a Easy delivery process, Quick Delivery and an Automated procedure

Scalability, Sustainability, Feasibility and Viability of the solution.

The proposed solution is sustainable as when the government allows the digital sky platform to come into picture, there would be a drone integrated society and it would save a lot of time to deliver food as compared to getting the food delivered by human beings (delivery executives).

The solution is feasible as this idea could help in removing the casualties (accident of delivery executives due to rash riding) and take less time to deliver the pizzas.

The feedback from the Domino's franchise is also on the positive side overall. In figure 5.4, we show the feedback we received from managers of Domino's through e pie chart based visual illustration.



Ideation 2:

Providing better customer experience:

Better customer support using the Chatbot

- Pizzas are not hot enough at the time of delivery.
- Customers cannot experience the real joy of having a pizza

Chances can also be customers sometimes provide falsifying the experience

Solution:

1. QuickBot
 - New option -“Delivery issues”.
 - simple 3-step process to register customers’ issues and get a compensation.
2. Experience-Centric
 - Delivery box modifications with Compartments and Thermal Indicators.
 - Prioritized deliveries.
3. Uniqueness
 - Easy 3-step process.
 - Quick and trusted response from Domino’s.
 - Automated procedure

PROTOTYPE 1

One of the proposals is developing an interactive chatbot for any enquiry customer can have. Figure 5.5 demonstrates a sample for the same.

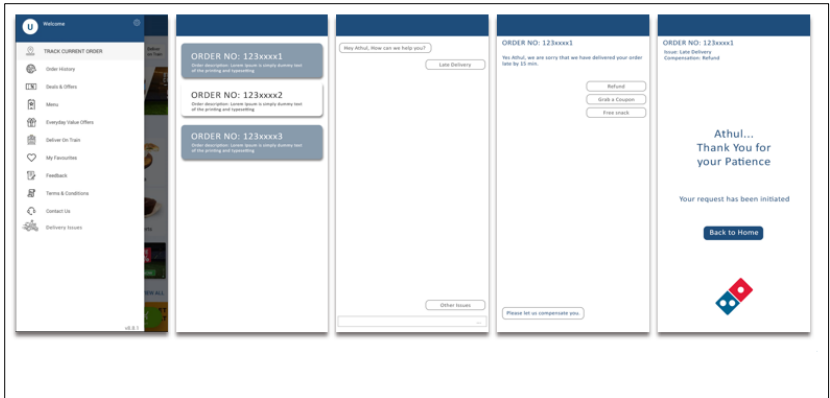


Figure 5.5: sample prototype demonstration of chatbot

PROTOTYPES 2:

The second design showcases a thermally insulated delivery box to keep the pizza warm during delivery. Figure 5.6 exhibits the prototype.

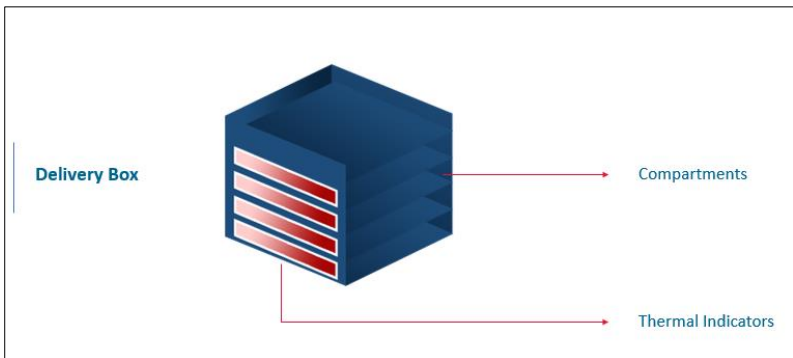


Figure 5.6: demonstration of insulated delivery box

Testing phase and feedback:

Feedbacks were received from store managers, sales managers and customers. Followings are the feedback received:

- ✓ The chatbot is designed to enhance customer interaction.
- ✓ The modified delivery box helps to fulfill Domino's commitment to delivering hot pizzas on time.
- ✓ The 3-step process simplifies the resolution of customer complaints.
- ✓ Multiple iterations of the model were made to improve insulation, as it was not perfectly suited to the problem at hand.
- ✓ The Kiosk model was discarded due to cost considerations.
- ✓ The thermal indicator-based delivery system could be offered as a premium service to customers.

CASE 2: CAFÉ COFFEE DAY

The purpose of the Cafe Coffee Day (CCD) case study is to analyze various methods to improve the customer experience at CCD stores to remain competitive in the cafe industry. CCD is one of India's largest coffee chains and was established in 1996. With over 1,700 locations throughout the country, CCD is a well-known destination for coffee lovers, students, professionals, and families. However, in recent years, CCD has faced challenges, including intense competition from other coffee chains, increased operational costs, and financial difficulties. The death of the founder and chairman, VG Siddhartha, in 2019, and the COVID-19 pandemic in 2020 have also impacted CCD's operations and revenue. Despite these challenges, CCD is working to bounce back and continue to offer quality coffee and service to its customers.

Empathy:

Several visits to various CCD locations were conducted to understand the perspectives of different stakeholders involved with CCD. Interviews were held with store managers and customers to gather information for creating an empathy map.

- The menu is outdated.
- Prices have not been updated.
- There is rarely a high customer foot traffic.
- The ambiance is not attractive.
- No customer engagement initiatives are in place.
- The menu is outdated.
- Prices have not been updated.
- There is rarely a high customer foot traffic.

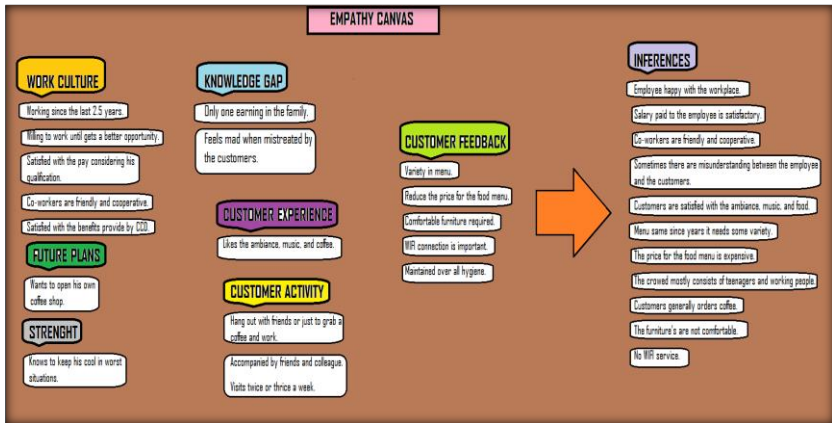


Figure 5.8: Empathy chart for CCD

The observations mentioned previously led to the creation of the empathy chart shown in figure 5.8. Our analysis showed that Cafe Coffee Day (CCD) should aim to lower its prices while maintaining the quality of its products. As cafes are popular hangout spots in cities and often serve as semi-workplaces, it would be beneficial for CCD to improve its infrastructure with features such as Wi-Fi and comfortable seating, and to ensure proper ventilation. Regular cafe-goers tend to spend long periods of time at the cafe, and to keep them engaged, CCD should consider expanding its menu offerings to make it more tempting and appealing. This could encourage customers to continue ordering and socializing without realizing how much time has passed.

PROBLEM ARTICULATION: STATE THE PROBLEM

Following the observation and empathy phase, the challenges faced by Cafe Coffee Day (CCD) have been identified and are outlined below.

1. How might we give a good food experience to the customers in CCD outlets?
2. How might we increase the footfall of customers in CCD outlets?
3. How might we reduce the shutdown of CCDs in many areas?

These problems are selected because they are relatively simple to address and have the potential to increase customer traffic. Customers of Cafe Coffee Day (CCD) desire a satisfying food experience and a relaxed atmosphere, which can be achieved with relative ease compared to other issues present in CCD.

Ideate and solution:

The following are some recommended solutions based on the pain points identified from the observational data, empathy charts, and problem analysis:

- ✓ Integrating the menu with online food delivery platforms such as Swiggy and Zomato for increased visibility and accessibility.
- ✓ Deleting menu items that are not in demand based on customer feedback and order data.
- ✓ Utilizing social media to communicate with customers and inform them of any changes to the menu.
- ✓ Improving the delivery time to provide quicker service.
- ✓ Offering home delivery services through partnerships with food delivery platforms such as Swiggy and Zomato to expand marketing reach.
- ✓ Upgrading the atmosphere to make the cafe more appealing and inviting to customers.
- ✓ Implementing a more effective feedback system to enhance standards and understand customer preferences.
- ✓ Installing a photo booth for customers to take selfies and share on social media.

- ✓ Revamping the menu and atmosphere to attract customers, as well as adjusting the operating hours.
- ✓ Enhancing the quality of food and improving the delivery speed to provide a better customer experience.

PROTOTYPE: PHOTOGRAPH WITH DESCRIPTION, AND BENEFIT YOU GAINED BY PROTOTYPING

The prototype stage entails the creation of sample prototypes based on the solutions previously outlined. A refreshed menu is suggested to draw in customers, and new items are proposed to enhance customer engagement and keep them at the cafe for longer periods of time. These enhancements are also expected to bring in new customers and raise revenue.

Proposed Menu Cards **Prototype 1:**

A revised menu has been created to include a range of options to appeal to customers' preferences. The sample is showed in figure 5.9.

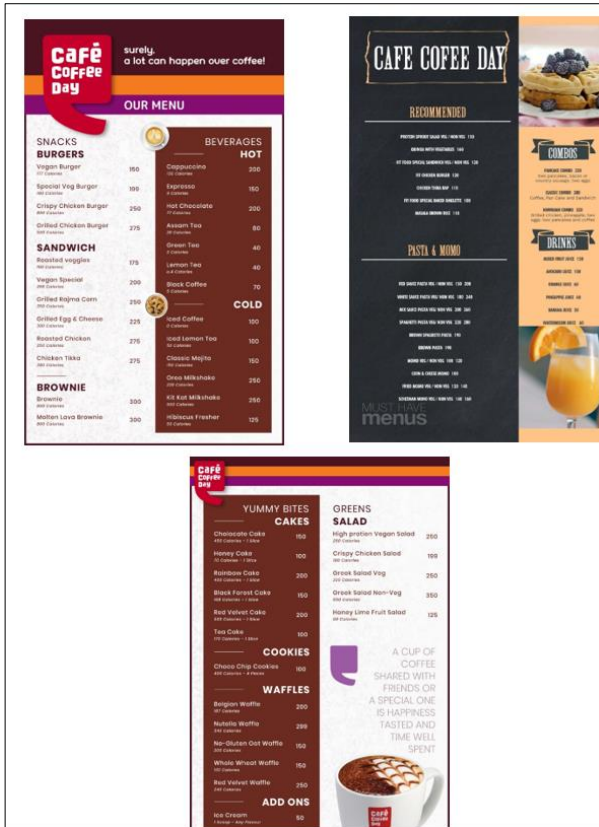


Figure 5.9: Sample menu card with varieties of choices

Prototype 2:

In order to boost customer engagement, the following prototypes have been proposed as a way to attract more customers and give the CCD outlets a themed appearance. Figure 5.10 exhibits sample theme specific café which CCD can also follow.



Model sports Corner



Books Corner



Model Children's Corner

Figure 5.10: Theme based café exhibit

Prototype 3

The My CCD app prototype aims to improve the customer experience by providing a one-stop location for all information about CCD outlets, including their cuisine, and eliminating the traditional billing process. The app features a

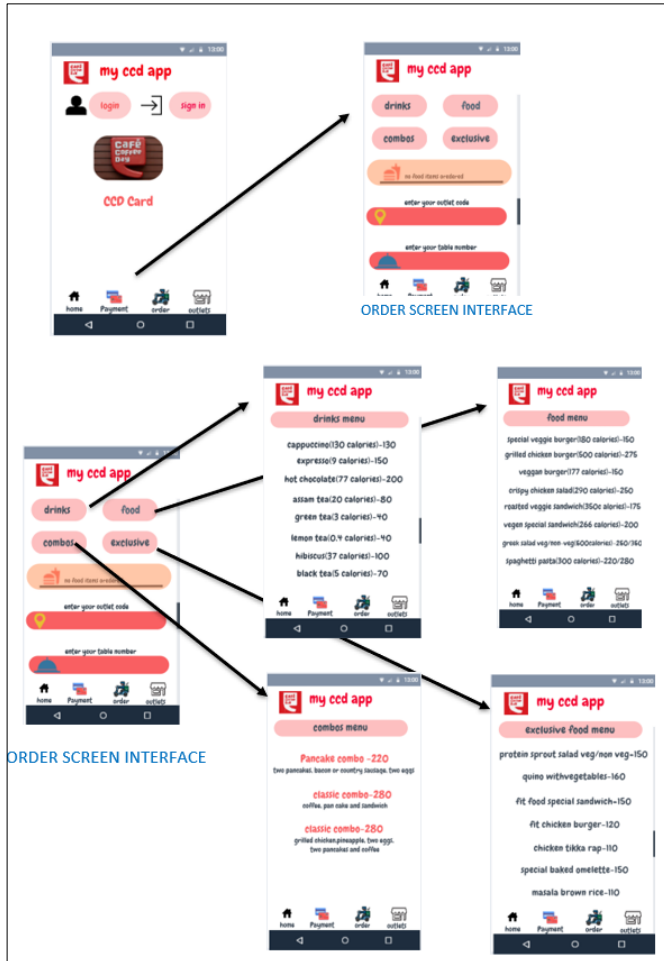


Figure 5.11: sample demonstration of MY CCD APP

login and sign-up option, as well as a membership option for customers to receive loyalty offers. With unique codes and table numbers for each outlet, customers can easily order directly from the app by entering the outlet code or their table number while in the outlet. This can be immensely helpful in managing the long queue in the outlets. The sample app is demonstrated in figure 5.11.

Test and feedback:

The customers are receptive to the changes made to the menu and have given some constructive feedback such as the need for more coffee varieties and lower prices. They have also shown interest in the concepts of a kids' and pet's corner. The employees have appreciated the efforts made to adapt to the changing needs and have expressed a desire for more coffee options, and they also appreciated the coffee mug painting competition. An expert in the field has commended the inclusion of calorie information but recommended adding the composition of each item and expanding the screen space of the CCD app. The expert has also proposed the idea of implementing an "Exchange books" concept in the book corner to keep the books fresh and updated. Based on the feedback from the store managers, it has been suggested that some CCD locations could be transformed into themed cafes to provide a unique and attractive appearance.

3. Conclusion

In conclusion it can be said that design thinking is a customer-centric approach to problem-solving that is widely used in various industries, including food and beverage. By empathizing with customers and exploring their needs, pain points, and desires, businesses can create products and services that are tailored to their target audience. In the food and beverage industry, design thinking can help improve customer experience by creating menus, store ambiance, and delivery processes that cater to customer needs. Additionally, by incorporating feedback from customers and employees, businesses can continuously refine their offerings and stay ahead of the competition. Ultimately, design thinking can be a valuable tool for businesses to drive growth and increase customer satisfaction in the food and beverage industry.



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